Model MS6200L

Bench-Top LPR Data Logger

The MS6200L is a bench-top data logger capable of measuring and storing data from all types of linear polarization resistance (LPR) corrosion probes. The instrument is microprocessor-based and features a simple, menu-driven interface using a 2-key keypad and a 2-line LCD display. It is housed in a



rugged but lightweight plastic enclosure and is ideally suited for use in laboratory environments. The adjustable handle can be used for carrying the unit, or can be used as a tilt stand to adjust the viewing angle.

Corrosion rate measurements are made using the linear polarization resistance technique. The instrument measures the current required to polarize the electrodes of a probe to a known potential. From the polarization potential and the measured current, polarization resistance can be calculated. Then, using Faraday's law, the instantaneous corrosion rate can be calculated from polarization resistance.

The MS6200L incorporates a high-precision zero-resistance ammeter (ZRA) for measuring galvanic current between electrodes. It also offers a high-precision voltmeter for measuring the open-circuit potential between electrodes.

The MS6200L takes probe readings on a user-programmable logging interval. Readings are time and date stamped as they are taken, then stored to memory. Between readings, the instrument remains in a "sleep" mode to conserve energy. The instrument's memory is capable of storing 3,000 readings, and is protected by a lithium back-up battery. Stored readings can be downloaded to a computer via USB or serial port for further analysis using the provided software. The software provides a simple and intuitive interface for downloading, viewing, and graphing the data.

Technical Specifications

<u>Model</u>

MS6200L - Bench-Top LPR Data Logger

Physical Data

| Instrument Weight: | 2.25 lb. (1.02 Kg) |
|------------------------------|------------------------------------------------|
| Total Weight w/ Accessories: | 4.45 lb. (2.02 Kg) |
| Instrument Dimensions: | 2.6"H x 10.3"W x 6.5"D (6.6cm x 26cm x 16.5cm) |
| Operating Temperature: | 32° to 122°F (0° to 50°C) |
| Storage Temperature: | -4° to 158°F (-20° to 70°C) |

Performance Data

| Measurement Type | Range | Resolution | Cycle Time |
|------------------|--------------|------------|-----------------|
| 2-Electrode | 0 to 200 mpy | 0.01 mpy | 2 min to 99 hrs |
| 3-Electrode | 0 to 150 mpy | 0.01 mpy | 1 min to 99 hrs |
| Galvanic | ± 999 μA | 1 µA | 1 min to 99 hrs |
| Potential | ± 999 mV | 1 mV | 1 min to 99 hrs |

Electrical Data

Power Requirements: Maximum Probe Cable Distance: Output Specifications: 100-240 VAC, 50/60 Hz 10 ft (3.05 m) RS-232 Output in Comma-Delimited ASCII Text Format

Special Features

- Microprocessor-based electronics
- Data storage capacity of 3,000 readings, with battery backup
- Menu-driven interface using a 2-key keypad and a 2-line LCD display

Accessory Items

10' Probe Cable, Meter Prover, 6 to 5-Pin Adapter, Galvanic Adapter, Communications Cable and Connector, Operation Manual, Corrosion Data Management Software

